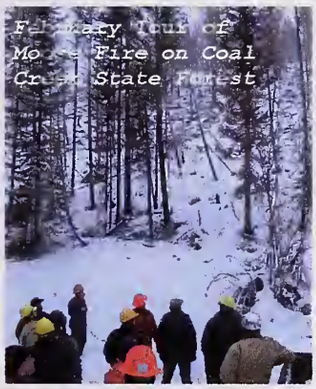
S
634.98
N7mfs
2002
Vol. 3

STATE DOCUMENTS COLLECTION
SEP 17 2002
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

Stillwater State Forest compound near Olney

Stillwater Unit, Montana Department of Natural Resources and Conservation (DNRC), is planning a timber sale that would salvage burned trees. During late summer and early fall of 2001, the Moose Fire burned 70,000 acres of U.S. Forest Service, Glacier National Park, private, and State lands. The fire burned 6,876 acres of State land located in Coal Creek State Forest, 17 miles north of Columbia Falls. Stillwater Unit manages Coal Creek State Forest, Stillwater State Forest, and some scattered sections. Money made from these lands produce long-term income to the school and public building trust funds.

Moose Fire


February Tour of Moose Fire on Coal Creek State Forest

A faller sawing down trees.

Timber sales earn money to support schools (public schools, colleges, school for the deaf and blind).

Phase I of this project salvaged about 5.5 million board feet (MMBF) of burnt timber during the fall and winter of 2001/2002. Timber in areas that were close to roads and easy to reach with the available logging equipment was harvested. Phase II includes the more difficult areas to harvest, such as ridges, which are a long way from roads and on the far side of larger creeks.

Logs being decked for loading onto trucks

Phase II includes 5 options. One option does nothing (No-Action Alternative A). The other 4 options (Action Alternatives B, C, D, and E) salvage various amounts of burnt timber. These 4 options have been developed by the ID Team (Interdisciplinary Team). This team is made up of foresters, an engineer, an

Feller/buncher harvesting burnt timber from Moose Fire

Logs on their way to a mill to be made into lumber

The Moose Fire took place in a lot of rugged terrain.
Coal Creek State Forest
Glacier National Park
Stillwater State Forest
Flathead National Forest
West Glacier

View of burned areas on Coal Creek Stat Forest

Many animals live in Coal Creek State Forest

MONTANA STATE LIBRARY
3 0864 0015 4111 2

economist, and water, soils, fishery, and wildlife specialists. Some options would also salvage trees that have been killed by bark beetles. These dead trees are located next to the burned areas. Depending on the option chosen, either temporary roads would be built to harvest the timber or the timber would be logged by helicopter. Helicopter logging is much more expensive than logging with ground equipment. Therefore, the options with helicopter logging do not include areas where profit made would be little or none. Logging activities would start in the summer of this year and finish by early winter.

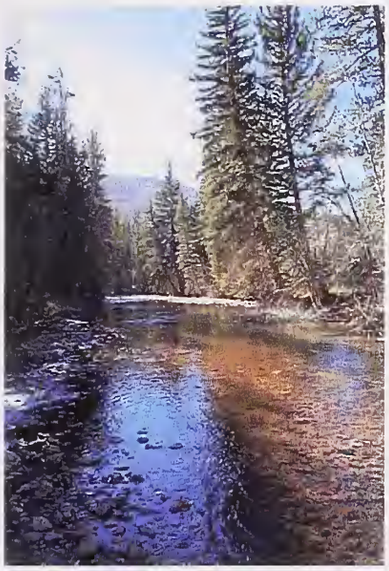
If Action Alternatives B, C, D, or E were chosen, between 561 acres and 1,311 acres would be logged, and between 4.4 (about 1,100 log-truck loads) and 8.9 MMBF (about 2,225 log-truck loads) could be harvested.

Timber that would be logged with one of the action alternatives

Harvesting burnt timber with a helicopter

Harvesting timber with ground-based logging equipment (log forwarder)

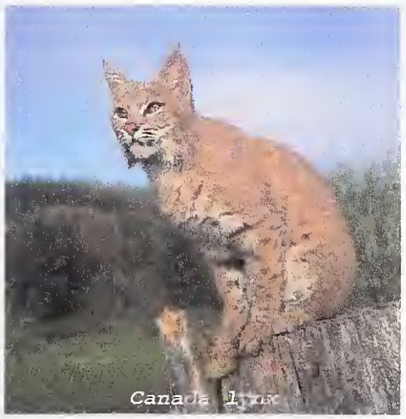
Another way of harvesting timber with ground-based equipment (lime machine)



Public Concerns

During Phase I, the public was notified that a second timber sale would be developed. We also wrote newsletters, advertised in local papers, and conducted several tours of the fire and Coal Creek State Forest.

As a result, people sent us letters and told us of their concerns. By studying the concerns of the public, other agencies, and DNRC employees, we directed our studies to explain the effects the proposed timber sale project would have on the following resources in this area.


Canada lynx

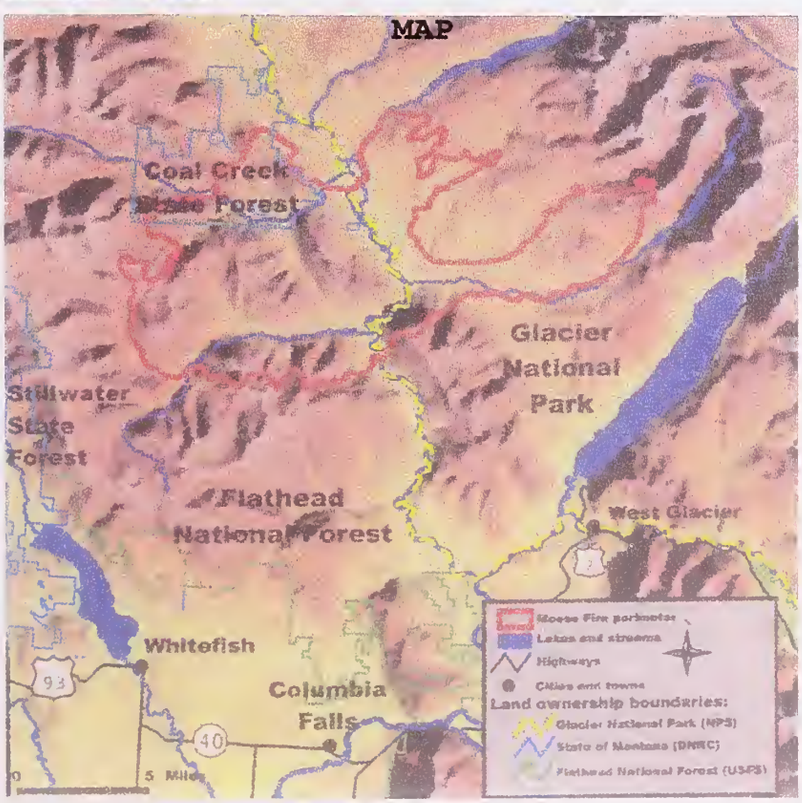
- Hydrology (water)
- Fisheries
- Vegetation
- Wildlife
  - * Threatened and Endangered species
    - ⇒ Bald eagle
    - ⇒ Canada lynx
    - ⇒ Grizzly bear
    - ⇒ Gray wolf
  - * Sensitive species
    - ⇒ Black-backed woodpecker
    - ⇒ Boreal owl
    - ⇒ Fisher
    - ⇒ Pileated woodpecker
- Economics
- Soils

Big Game—Moose

Old-growth Forest

Black-backed woodpecker

Sensitive Species—Forest Owl



Recreation

Threatened and Endangered Species—Gray Wolf

No-Action Alternative A and Action Alternatives B and C *at a glance...*

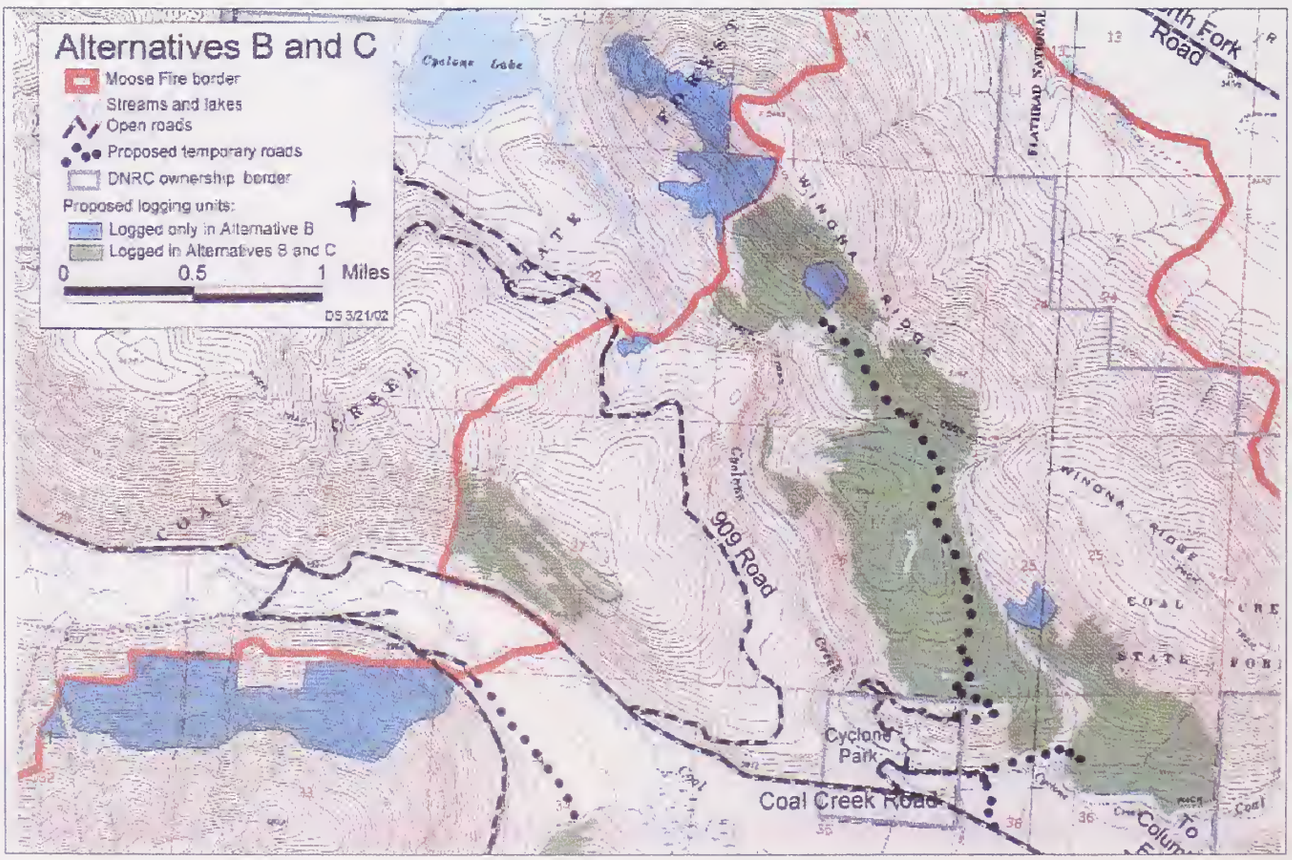
Under No-Action Alternative A, no trees would be cut at this time. The area would be studied to assess whether trees need to be planted, roads need repair, or we need to look further to find a way to keep trees safe from insects.

If Action Alternative B were chosen, some of the burnt trees would be harvested in old-growth areas. The purchaser of the timber sale would build about 3.4 miles of new roads, install 3 temporary bridges, and fix about 2.8 miles of existing roads. When logging is finished, the bridges would be removed and the new roads would be made unusable to motor vehicles.

Logging would be done with both standard ground-based logging equipment (skidders, line machines, feller/ bunchers, etc.) and helicopters. Logging would take place over approximately 1,300 acres, removing about 8.8 million board feet (2,200 log truck loads) of timber. Of the action alternatives, this option would harvest the most timber. (Both green and blue areas on map below would be harvested.)

If Action Alternative C were chosen, burnt trees would not be harvested in old-growth areas. The Purchaser of the timber sale would build about 3.4 miles of new roads, install 3 temporary bridges, and fix about 1.25 miles of road. When logging is completed, the bridges would be removed and the new roads would be made unusable to motor vehicles.

Logging would be done with both standard ground-based logging equipment (skidders, line machines, feller/bunchers, etc.) and helicopters. Logging would take place over 912, acres, approximately, removing about 4.8 million board feet (1,200 log truck loads) of timber. (Green areas on map below would be harvested.)



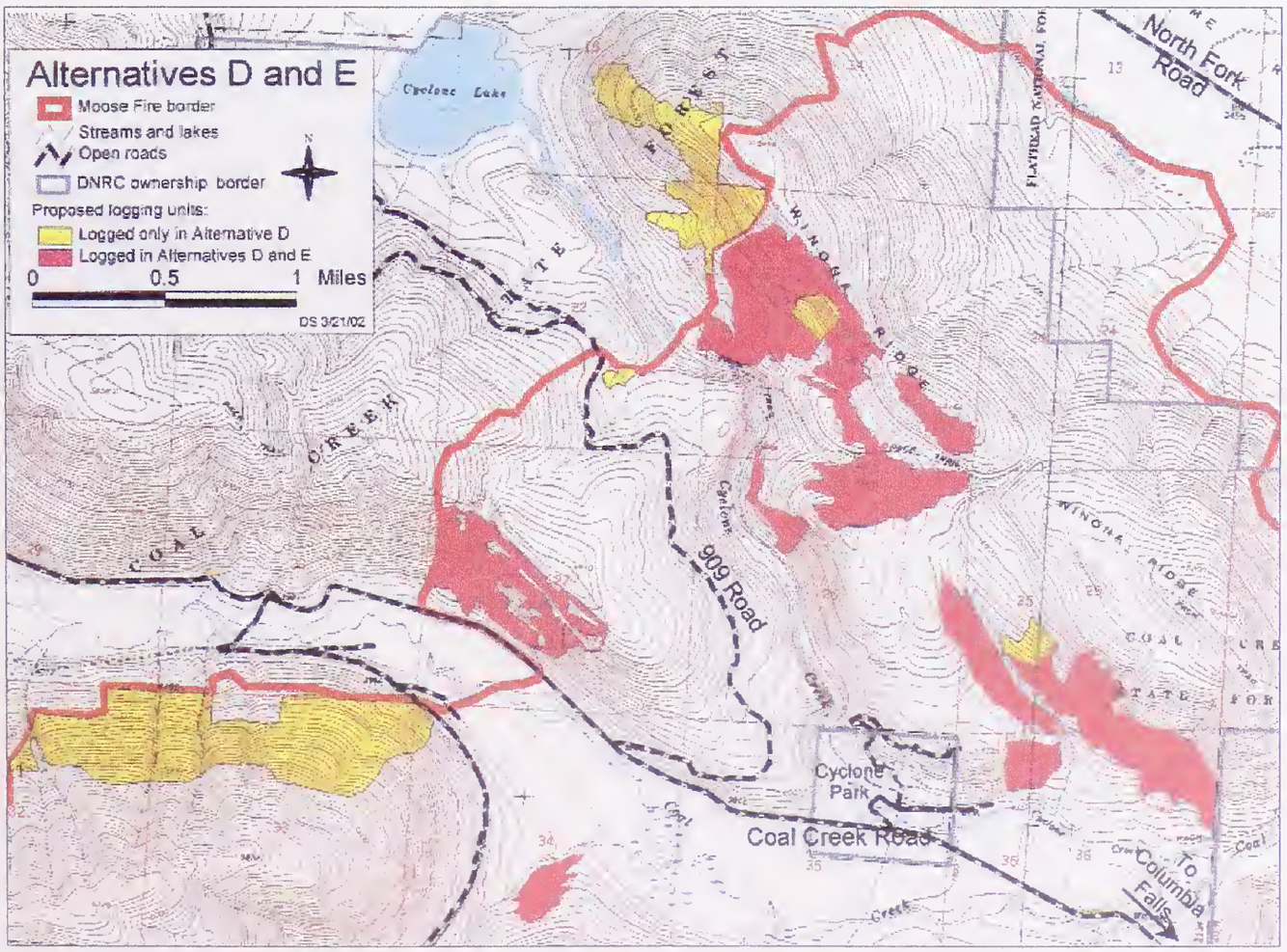
Action Alternatives D and E *at a glance...*

If Alternative D were chosen, the Purchaser of the timber sale would helicopter log 99 percent of the harvest units. Some of the burnt trees would be salvaged from old-growth areas. No roads would be built, but approximately 1.6 miles of existing road would be repaired.

The logging activities would take place over approximately 968 acres. About 8.4 million board feet (2,100 log truck loads) of timber would be harvested. (Both red and yellow areas on the map below would be harvested.)

If Alternative E were chosen, the Purchaser of the timber sale would helicopter log all the harvest units. Trees would not be salvaged from old-growth areas. No roads would be built.

The logging activities would take place over approximately 561 acres. About 4.4 million board feet (1,100 log truck loads) of timber would be harvested. (Red areas on the map below would be harvested.)

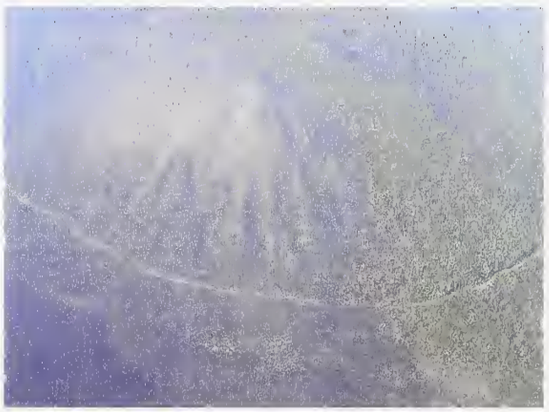


Summary of Effects

The ID Team studied how Alternatives A through E would affect the resources listed on page 3. The following summary tells how the resources would be affected if the project does, or does not, take place.

Water Quality, Soils, and Fisheries

Since the vegetation and duff was burned on most of the many acres burned by the Moose Fire, water quality is expected to be highly affected. These effects will likely occur even if no additional logging is done. Water quality is closely tied to good fish habitat in regards to the amount of sediment getting into streams, the amount of wood left around and in streams, and the temperature of the streams. Action Alternatives B and C could have the most effect on sediment delivery to streams because it proposes to build several roads near and install bridges over the streams. Road builders would use the latest methods to control erosion. Therefore, little effects are expected beyond what would naturally occur.



Culvert installed to prevent sediment from entering the stream.

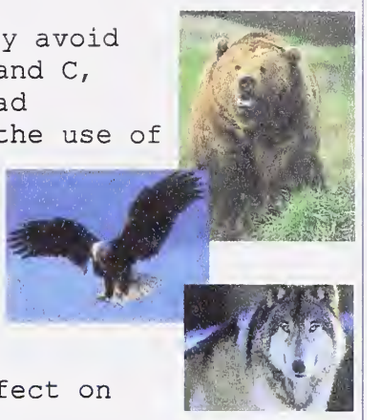
Vegetation

The Moose Fire in Coal Creek State Forest burned to varying degrees. Some areas were totally scorched, leaving trees without most of their limbs, while in other areas the fire crept around. Depending on kind of trees (western larch, Engelmann spruce, etc.), some were weakened by these creeping fires. Bark beetles often attack weakened trees, killing them. Alternatives B and D plan to harvest the areas most susceptible to future beetle attacks.

Forest fires kill trees and create snags. The number of snags depends on the kind of trees and how hot the fire burned. The Moose fire was very large, and burned over 6,800 acres on Coal Creek Forest, alone. All proposed action alternatives would leave two to five large-sized snags per acre within the harvest units. Areas along both sides of streams (streamside management zones) would have 50 percent of the trees and snags left standing.

This fire burned through areas that DNRC classified as old growth before the fire. Some of these areas still have the number of live trees that would classify them old growth. Alternatives B and D propose to harvest some of the burned trees in these areas. If one of those alternatives were chosen, those areas would no longer be considered old-growth. The expected number of live, large-diameter trees still remaining in these areas would be approximately the same in all action alternatives. Many more snags and downfall would be left in these areas if Alternatives A, C, or E were chosen.

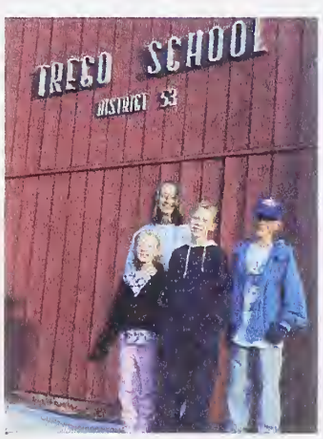
Wildlife



Threatened and Endangered Species – Grizzly bears would probably avoid areas during active logging operations. In Alternatives B and C, grizzly bears will lose habitat for a short while due to road construction and use. Alternatives B and C would increase the use of roads in the area and decrease the security. Alternative D would only increase the amount of use on existing roads in the area. Alternative E would not affect the amount of roads. Gray wolves aren't expected to be affected by the logging. If Alternatives B or D were chosen, the Canada lynx denning habitat would be reduced by a small amount. Bald eagle territory might be altered slightly if an action alternative were chosen, but the harvests should have no affect on their breeding success or survival of their young.

Sensitive Species – A reduction in habitat for black-backed woodpeckers would occur if burnt trees are salvaged, but effects, over the fire area would be slight. The habitat for boreal owls would be changed slightly under Alternatives B and D. Logging could reduce denning and resting habitat for fishers in the future. All of the action alternatives would cause the pileated woodpecker to lose some potential nesting and feeding habitat, though it would be more so with Alternatives B or D.

Economics



If Alternative A were chosen, no additional money would be earned State and the school trust funds from the Moose Fire area on Coal Creek State Forest.

Alternative B would earn about $1,749,531 for the State and the school trust funds. The trust fund portion of that money would be sufficient to send 110 kindergarten to grade 12 students to school for one year.

Alternative C would earn about $879,505 for the State and the school trust funds. The trust fund portion of that money would be sufficient to send 55 kindergarten to grade 12 students to school for one year.

Alternative D would earn about $1,377,608 for the State and the school trust funds. The trust fund portion of that money would be sufficient to send 74 kindergarten to grade 12 students to school for one year.

Alternative E would earn about $647,734 for the State and the school trust funds. The trust fund portion of that money would be sufficient to send 33 kindergarten to grade 12 students to school for one year.

Information and Overview of the DEIS

This Executive Summary of the Draft Environmental Impact Statement (DEIS) is designed to encompass the Montana Environmental Policy Act (MEPA) rules. The information is written so that it is easily understood with the supporting photographs and maps.

The DEIS contains a more complete description of the purpose, development, analyses, and conclusions of the proposed project. The DEIS also has appendices on specific resources (hydrology, fisheries, wildlife, etc.). The resource appendices were written by the ID Team and are lengthy technical discussions of methodologies, research, monitoring, baseline studies, analyses, etc. The DEIS summarizes the resource appendices in plain language, thus, ensuring that all interested parties, regardless of their scientific or technical abilities, can understand this proposal and its effects. All of these documents are available on the web at www.dnrc.state.mt.us.

Because the analysis work required technical procedures and terminology, the information in the appendices would need to be utilized for any scientific, technical, or legal review.

The DEIS and its appendices will be sent to people that have, over the course of this project, requested the documents. Comments on the draft documents will be accepted for 30 days. After comments are received, compiled, and studied, a Final EIS (FEIS) will be prepared. Following publication of the FEIS, Robert Sandman, Stillwater Unit Manager, will choose an alternative, or combination of alternatives. This decision will be recommended to the Montana Land Board, who has the ultimate decision responsibility. Currently there is no preferred alternative.

Copies of this document were published at an approximate cost of $3.50 per copy for printing and $0.60 for mailing.